

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Revision of the Commission's Rules)	CC Docket No. 94-102
To Ensure Compatibility with)	
Enhanced 911 Emergency Calling Systems)	
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**SPRINT CORPORATION
TENTH QUARTERLY
E911 IMPLEMENTATION REPORT**

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TABLE OF CONTENTS

Summary.....	ii
I. Introduction.....	1
A. Sprint Handset Activation Rate	1
B. Sprint Phase I & II Deployments	2
C. Challenges Beyond Sprint's Control	2
D. FCC Reporting Requirements	3
II. Current Status of Phase I and II Requests.....	4
A. Phase I Status.....	4
B. Phase II Status.....	5
III. Network Readiness	6
IV. Current Handset Sales	7
V. Compliance With Outstanding Benchmarks.....	8
VI. Affidavit Requirement.....	9
VII. Conclusion.....	10

Appendices

- A. FCC Reporting Schedule
- B. Declaration of Kathy Walker, Executive Vice President – Network Services, Sprint

SUMMARY

Sprint reports to the Commission on its Phase I and II deployment activities, to date. Sprint has now launched Phase I services in 1,986 PSAPs and deployed Phase II services in more than 699 PSAPs. The following are highlights of Sprint's accomplishments:

- Sprint was the first and only carrier to begin selling GPS enabled devices on October 1, 2001.
- Sprint was the first carrier to deploy a handset based Phase II operating system – deploying service covering the State of Rhode Island in December 2001.
- Sprint was the first to complete installation of all the national platforms, switch and cell site upgrades required to support Phase II E911 service across its entire nationwide network on June 14, 2002, more than a month ahead of the FCC's deadline. Sprint has been capable of supporting Phase II implementations nationwide for almost two years.
- Sprint was the first and only carrier to effectively convert 100% of all new handset activations to GPS enabled devices, reaching 99% of new handset activations on June 28, 2003.
- Sprint has offered more than twenty different GPS enabled handset models since October 1, 2001. Indeed, older Phase II handsets are being phased out of the current handset lineup as obsolete.
- Sprint has sold over 21 million GPS-enabled handsets since October of 2001.
- Sprint deployed 110 new Phase I PSAPs during the first quarter of 2004, for a total of 1,986 Phase I PSAPs in forty-one states.
- Sprint deployed 124 new Phase II PSAPs during the first quarter of 2004, for a total of 699 PSAPs in thirty different states.

Although Sprint has met all current FCC mandates, and has a network capable of supporting Phase II deployment nationwide, live Phase II deployment efforts continue to face challenges. As noted in previous reports, LEC and PSAP readiness issues continue to impact Sprint's ability to make Phase II services available to its customers. As Sprint has continually advised the Commission, it cannot unilaterally deploy Phase I or Phase II services. Sprint remains proud of its accomplishments in this area and will continue to work cooperatively with LECs, PSAPs, vendors, regulatory bodies and public officials to overcome remaining technical and administrative hurdles facing E911 deployment.

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**SPRINT TENTH QUARTERLY
PHASE II IMPLEMENTATION REPORT**

Sprint Corporation, on behalf of its wireless operating company, Sprint Spectrum L.P., d/b/a Sprint PCS ("Sprint"), submits its Tenth Quarterly Phase II Implementation Report in compliance with the Commission's October 12, 2001 *Sprint Waiver Order*.¹

I. INTRODUCTION

A. Sprint Handset Activation Rate

Sprint set a new standard for the industry by becoming the first carrier to effectively meet the Commission's 100% new activation requirement during the second quarter of 2003. For the week ending June 28, 2003, 99.5% of new handset activations from all Sprint controlled outlets were GPS enabled. 93.7% of *all* handset activations, including used handsets, older models and handsets sold through third party outlets, were GPS enabled.²

¹ See, *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Sprint Spectrum L.P. d/b/a Sprint*, 16 FCC Rcd 18330 (2001) ("Sprint Waiver Order").

² FCC rules exclude older models and refurbished models from the benchmark calculation. See *Fourth E911 Order*, 15 FCC Rcd 17442, 17455 n.62 (2000) ("The new handset activation benchmarks apply only to new handsets, not to new activations of older model or refurbished handsets."). Because reactivations of used handsets are not tracked in the same manner as total gross activations, the exact percentage of GPS enabled new handset activations (the benchmark measurement) required separate calculation. A sample study of handset sales for the first two weeks of June showed that approximately 10% of total

Although the Commission's rules are drafted in terms of absolute mathematical percentages, the nature of distribution channels and customer choice prevent such precision in reporting. Various factors will continue to prevent Sprint from being able to certify that 100% of all activations are GPS enabled. Customers may activate phones that were purchased in the past, but never previously used. Third party distributors also tend to have older inventory that can appear as new non-GPS activations. Sprint cannot refuse to offer service to customers that have purchased these handsets, nor does Sprint have the right to demand that such third parties cease the sale of non-GPS handsets. Nonetheless, the number of handsets at issue is extremely small and is continuing to decline in comparison to total activations. For those activations that remain within its control, Sprint has effectively met the 100% activation benchmark.

B. Sprint Phase I & II Deployments

Sprint deployed an additional 110 Phase I PSAPs during the first quarter of 2004 and an additional 124 Phase II PSAPs. Based upon the FCC's counting conventions, Sprint has now deployed Phase I services for 1,986 PSAPs and has deployed Phase II services for 699 PSAPs.

C. Challenges Beyond Sprint's Control

Phase II deployment continues to face challenges from areas outside of Sprint's control. Many LECs are still unable to pass Phase II data to their PSAPs or are awaiting further cost recovery mechanisms before they permit Phase II services to be deployed. Likewise, many PSAPs face funding or other obstacles to deployment that prevent the service from being deployed in their jurisdictions. Indeed, the vast majority of PSAPs have not requested Phase I service, much less the more accurate Phase II service. While Sprint has expended huge amounts of capital to

gross additions were in fact reactivations of previously used handsets. As would be expected, the majority of these reactivated/used handsets were older non-GPS enabled models. Once these handsets are

achieve the goals set by the Commission, including the aggressive conversion of its handsets, most of this investment will go unused for the foreseeable future. Indeed, it is likely that a large number Phase II capable handsets sold by Sprint to date will become obsolete and will be discarded before Phase II services are ever available.

D. FCC Reporting Requirements

In June of 2003, the Wireless Telecommunications Bureau (WTB) established new guidelines for reporting deployment of enhanced 911 services.³ As discussed in its previous reports, Sprint has identified a number of issues surrounding this reporting format. Sprint has attempted to provide the information requested in the format posted by the WTB. Unfortunately, this reporting format has created confusion over naming conventions and the number of PSAPs serving particular jurisdictional boundaries. As a result, Sprint cannot make direct comparisons between the numbers contained in reports prior to June of 2003 and the numbers contained in the attached schedule. For example, some PSAPs that Sprint has deployed are not identified on the WTB spreadsheet and other entities identified on the spreadsheet do not appear to be PSAPs. Although Sprint has made its best effort to convert its information to this new format, Sprint must acknowledge that reporting ambiguities are inevitable given the confusion over naming conventions.

Sprint once again urges the Commission to correct the format and contents of the new reporting requirements to permit carriers to provide accurate information and to ensure that the Commission's goal of streamlining and uniformity are achieved. One wireless carrier may report

eliminated from total gross activations, as required under the rules, the GPS enabled new handset activation rate for all outlets, including third party retailers, was 98.13%.

³ Wireless Telecommunications Bureau Standardizes Carrier Reporting on Wireless E911 Implementation, Public Notice, DA 03-1902 (June 6, 2003).

the number of PSAPs contained in the report and another may report the number of PSAPs actually in the state. Similar lack of uniformity may surround how Phase I and II deployments are reflected for the same PSAP. For these and other reasons previously reported, Sprint cautions the Commission that attempts to comply with its reporting format may result in confusion and further PSAP inquiries to the Commission and Carriers.

II. CURRENT STATUS OF PHASE I AND II REQUESTS

The *Sprint Waiver Order* specified that this Sprint report “must include information on all pending Phase I and Phase II requests.”⁴ Sprint provides this information below.

A. Phase I Status

Sprint has worked cooperatively with PSAPs across the country to deploy Phase I (cell site/sector location) E911 services. It has accommodated Phase I requests regardless of PSAP technology choices and has utilized CAS, NCAS and Hybrid CAS/NCAS (*i.e.*, LEC) solutions. As of April 2004, Sprint is providing Phase I E911 services to 1,986 PSAPs in forty-one states, which represents the addition of approximately 110 Phase I systems from last quarter. Details regarding the status of Phase I requests are contained within Appendix A.

An important component of E911 implementation is open communication with the PSAPs, and Sprint has attempted to keep PSAPs informed of its efforts and status. However, due to the nature of this process, communications sometimes break down. During the first quarter of 2004, Sprint received an informal complaint from the Santa Cruz, Arizona PSAP regarding failure to deploy a Phase I request within six months. Upon learning of this complaint, and the communications failure involved, Sprint immediately escalated the issue with its vendors and deployment was completed within 40 days of the original deployment deadline. Other than this

⁴ *Sprint Waiver Order* at ¶ 28.

incident, Sprint is aware of no pending complaints against the Company where the installation process was not completed within six months or where the parties have not agreed upon a new deployment schedule.

The "Date PSAP Made Request" column in Appendix A indicates the date that Sprint first received the PSAP request, even if the PSAP did not at that time meet the prerequisites of Rule 20.18. Sprint's objective is to deploy Phase I with as many PSAPs as possible. Accordingly, Sprint has not attempted to segregate those requests as valid or invalid under the prerequisites contained in Rule 20.18, but has attempted to move forward on all requests. Where deployment is not possible within six months of a request, Sprint has established an agreed upon deployment schedule as permitted under the Commission's *Richardson Reconsideration Order*.⁵ At the Commission's request, Sprint will provide additional information with respect to specific deployments and PSAP circumstances presented in each case.

B. Phase II Status

Sprint continues to deploy Phase II systems as quickly as possible. Sprint launched 124 new PSAPs in the last quarter bringing total deployments to 699.⁶ Details regarding the status of specific Phase II requests are contained in Appendix A attached hereto.

As previously reported, LEC delays affected the validity of certain PSAP requests and prevented Sprint from deploying all PSAP requests made as of June 30, 2002 by December 31, 2002. In anticipation of that deadline, however, Sprint contacted each PSAP requesting Phase II service prior to December 31, 2002, and confirmed both their status and a schedule for future

⁵ *In the Matter of Petition of City of Richardson Texas*, Order on Reconsideration, CC Docket 94-102, FCC 02-318, (November 26, 2002) ¶29.

⁶ Again, discrepancies between this number and reports prior to June of 2003 are the result of the FCC's new numbering conventions.

action towards deployment. Accordingly, Sprint is operating under an agreed upon schedule with all PSAPs as permitted under the Commission's *Richardson Reconsideration Order*.⁷ Once the ALI provider has made the necessary upgrades and permits the transmission of Phase II data, and PSAP readiness is achieved, Sprint will complete work on all Phase II requests using an agreed upon deployment schedule.

Sprint has not attempted to segregate Phase II requests based upon validity under the *Richardson Order*, and has moved forward with implementation efforts in all requesting PSAPs. Moreover, Sprint has reached an agreed upon implementation schedule with each of the Phase II requesting PSAPs as permitted under the *Richardson Reconsideration Order* and accordingly, Sprint is in compliance with the Commission's rules regardless of the validity of a given request. To confirm, however, where a PSAP has made a Phase II request, and the ALI provider has not upgraded its ALI database, or prohibits the use of that ALI database contingent upon tariff approval, the PSAP is unable to receive or utilize Phase II information. As Sprint has noted in previous filings, a PSAP will be unable to receive Phase II data unless the necessary ALI and CPE upgrades have been performed.⁸

III. NETWORK READINESS

The *Sprint Waiver Order* specified that this quarterly report contain a statement whether "Sprint has completed its Phase II conversion of all Lucent switching software" by May 30, 2002, and "whether Sprint has completed its Phase II conversion of all Nortel switching software" by August 1, 2002. Sprint not only completed these network upgrades by the FCC's

⁷ *In the Matter of Petition of City of Richardson Texas*, Order on Reconsideration, CC Docket 94-102, FCC 02-318, (November 26, 2002) ¶29.

⁸ See Sprint Reply Comments in Support of its Petition for Reconsideration and Clarification, CC Docket No. 94-102 (Jan. 28, 2002).

benchmark dates, it completed the required installation of all national platforms and upgrades to its network infrastructure ahead of the Commission's schedule. Sprint's entire national network has now been Phase II enabled for more than a year and a half.

A. Lucent Markets

Sprint completed installation of switch software upgrades in all of its Lucent markets on March 6, 2002, almost three months in advance of the Commission's May 30, 2002 deadline.

B. Nortel Markets

Sprint completed installation of switch software upgrades in all of its Nortel markets on June 14, 2002, over a month and a half in advance of the Commission's August 1, 2002 deadline.

IV. CURRENT HANDSET SALES

The *Sprint Waiver Order* specified that this Sprint quarterly report "must also include information on current handset models being activated or sold that are GPS-capable and important events effecting location-capable handset penetration levels, such as introduction of new handset models."⁹

Sprint has introduced more than twenty GPS enabled handset models since October 1, 2001. Indeed, many of the early GPS handset models are now being retired as obsolete. All new handset models introduced by Sprint are GPS enabled, and have been since January of 2003. With the exception of an extremely limited amount of older inventory purchased prior to that date, all Sprint handset models are now GPS enabled. As of June 28, 2003, 99.5% of all new handset activations from Sprint controlled outlets were GPS enabled. As of the end of first quarter of 2004, Sprint had sold over 21 million GPS-enabled handsets.

⁹ *Sprint Waiver Order* at ¶ 28.

On December 1, 2003, the FCC released its *E911 Extension Order*¹⁰ regarding the obligations of various parties to provide E911 services and interpreting its rules with respect to data devices and their inclusion in handset activation rates. In that Order, the FCC clarified that PDA devices with voice capacity would be considered handsets within the rules and would be required to be GPS enabled for carriers using a GPS based E911 system. As noted in previous reports, early PDA devices were not GPS enabled due to their different chip architecture. Sprint continued to work with manufacturers, however, and all new PDA devices introduced by Sprint since January 1, 2003 have been GPS enabled. Some inventory of the older non-GPS PDA devices remains, but that number is small and continues to diminish. As noted above, all new PDA devices introduced since January 1, 2003 are GPS enabled models.¹¹

V. COMPLIANCE WITH OUTSTANDING BENCHMARKS

The *Sprint Waiver Order* specified that this Sprint report “must also contain statements regarding whether Sprint PCS has met each deployment benchmark and, if not, the reasons for its failure to comply.”¹²

Sprint has met all benchmarks passed, to date, including the revised benchmark for compliance with the Commission’s requirement that 100% of new handset activations be GPS enabled by June 30, 2003 (with the clarifications outlined above).¹³ Specifically, Sprint began selling GPS handsets by October 1, 2001. Sprint met the interim benchmark that 25% of handset

¹⁰ In the Matter of Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, *Report and Order and Second Further Notice of Proposed Rulemaking*, CC Docket No. 94-102, FCC 03-290 (Released December 1, 2003) (the “*E911 Extension Order*”).

¹¹ Sprint does not include in its calculations aircards (a/k/a wireless modems) which are used for data services and are not handsets.

¹² *Sprint Waiver Order* at ¶ 28.

¹³ See, *In the Matter of Request for a Limited and Temporary Rule Waiver by Sprint*, FCC 03-133, Order, CC Docket 94-102 (June 16, 2003)

activations be GPS enabled by July 31, 2002.¹⁴ Sprint completed network upgrades to its Lucent and Nortel switches well before the Commission deadlines of May 30, 2002 and August 1, 2002. The Commission also ordered Sprint to provide service to all PSAPs who had made a valid request on or before June 30, 2002, by December 31, 2002. The majority of requests received prior to June 30, 2002 would be considered invalid under the rules in effect at the time the requests were issued, because the PSAP was unable to receive or utilize Phase II information. The validity of these requests should no longer be an issue, however, because Sprint has reached agreement with all Phase II requesting PSAPs regarding implementation as permitted under the *Richardson Reconsideration Order*. Accordingly, Sprint is in compliance with the *Sprint Waiver Order*.

The *Sprint Waiver Order* also directed Sprint to provide a statement regarding the accuracy milestone. The rules provide that handset-based location solutions must provide the location of wireless 911 calls with an accuracy of 50 meters for 67 percent of calls and 150 meters for 95 percent of calls.¹⁵ Testing of Sprint's technology choice, including individual testing of each new GPS handset model, indicates that it is meeting the Commission's accuracy requirements.

VI. AFFIDAVIT REQUIREMENT

The *Sprint Waiver Order* specifies that Sprint "must support each Quarterly Report with an affidavit, from an officer or director of Sprint, attesting to the truth and accuracy of the re-

¹⁴ The Commission's Waiver Order is ambiguous regarding the manner in which compliance with the July 31, 2002, 25% activation rate was to be calculated. At least one interpretation of the Order is that compliance should be determined based upon the percentage of GPS enabled handsets sold between July 31, 2002 through December 30, 2002. See, Waiver Order, ¶28. Under this interpretation, Sprint exceeded the benchmark by a large margin.

¹⁵ 47 C.F.R. § 20.18(h)(2).

port.”¹⁶ Appendix B is the conforming Declaration of Kathy A. Walker, Executive Vice President – Network Services, Sprint.

VII. CONCLUSION

Sprint remains a leader in E911 deployment efforts. Through this report, Sprint provides the Commission with updated information concerning its activities in this important area.

Respectfully submitted,

**SPRINT CORPORATION on behalf of
SPRINT SPECTRUM L.P., d/b/a Sprint PCS**



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¹⁶ *Sprint Waiver Order* at ¶ 28.

Appendix A